

ABSTRACT OF THE DISCLOSURE

There is provided an electron beam wiring technique which can correct deflection for a micro field used in electron beam writing equipment with high precision.

Electron beam writing equipment has an electron source; an electron optics system irradiating for scanning an electron beam emitted from the electron source on a sample via deflection means having at least two different deflection speeds and an objective lens to form a desired pattern on the sample; a stage mounting the sample; a mark for beam correction provided on the stage; an electron detector detecting a backscattered electron, a secondary electron or a transmission electron obtained by irradiation of the electron beam; a function moving the electron beam by high speed scanning with the deflection means to repeat formation of a patterned beam ; a function moving the electron beam on the mark for beam correction by low speed scanning with the deflection means in synchronization with one cycle of the repetition; and a function detecting a backscattered electron or a secondary electron emitted from the mark for beam correction and near it by the low speed scanning or a transmission electron transmitted through the mark for beam correction to correct the position or the deflection distance of the electron beam or blanking time from the detected result.